

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.



Electronic Filing System (EFS) Data  
Electronic Patent Application Submission  
USPTO Use Only

EFS ID: 67638  
Application ID: 09590955  
Title of Invention: Phase Shifting Applications of  
Universal Frequency Translation  
First Named Inventor: Martin JOHNSON  
Domestic/Foreign Application: Domestic Application  
Filing Date: 2000-06-09  
Effective Receipt Date: 2004-08-30  
Submission Type: Information Disclosure Statement  
Filing Type:  
Confirmation number: 2387  
Attorney Docket Number: 1744.0710005  
  
Total Fees Authorized: 180.0  
Payment Category: Credit Card  
Credit Card Number: \*\*\*\*\*1005  
Expiration Date: 08312005  
Card Holder Name: SKGF PLLC  
Postal Code: 20005  
RAM Payment Status: RAM success  
RAM User ID: EFSPROD  
RAM Accounting Date: 2004-08-30  
RAM Sequence Number: 1125470



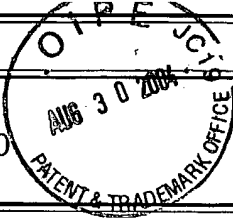
RECEIVED

SEP 02 2004

Technology Center 2600

Digital Certificate Holder: cn=Jeffrey Weaver,ou=Registered Attorneys,ou=Patent and Trademark  
Office,ou=Department of Commerce,o=U.S. Government,c=US  
Certificate Message Digest: 83a307e3ee4baf85f2329a6b11560065b19003be

SUB\_TYPE=Information\_Disclosure\_Statement EFS\_ID=67638 APP\_ID=09590955 DOC\_TYPE=CoverSheet



## Title of Invention

Phase Shifting Applications of Universal Frequency Translation

Application Number: 09/590955



Date: 2000-06-09

First Named Applicant: Martin R. JOHNSON

Confirmation Number: 2387

Attorney Docket Number: 1744.0710005

RECEIVED

SEP 02 2004

Technology Center 2600

I hereby certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.

I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.

Submitted by:	Elec. Sign.	Sign. Capacity
Jeffrey S. Weaver Registered Number: 45608	/JSW/	Attorney

Documents being submitted

us-fee-sheet

us-ids

Files

1744.0710005\_3rdSupp\_eIDS-usfees.xml

us-fee-sheet.xsl

us-fee-sheet.dtd

1744.0710005\_3rdSupp\_eIDS-usidst.xml

us-ids.dtd

us-ids.xsl

Comments

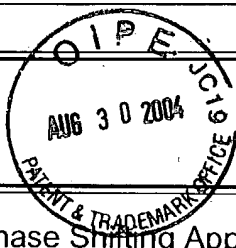
RECEIVED

SEP 02 2004

Technology Center 2600

## FEE TRANSMITTAL

Electronic Version v08  
Stylesheet Version v08.0



Title of Invention

Phase Shifting Applications of Universal Frequency Translation

Application Number: 09/590955



Date: 2000-06-09

First Named Applicant: Martin R. JOHNSON

Attorney Docket Number: 1744.0710005

Art Unit: 2634

Examiner: Curtis B.Odom

RECEIVED

SEP 02 2004

Technology Center 2600

## TOTAL FEE AUTHORIZED \$180

Patent fees are subject to annual revisions on or about October 1st of each year.

## BASIC FILING FEE

Fee Description	Fee Code	Amount \$	Fee Paid \$
Submission Of Information Disclosure Stmt Fee	1806	180	180

## AUTHORIZED BILLING INFORMATION

The commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Credit account number: 1005

Expiration Date (YYYYMMDD): 2005-08-31

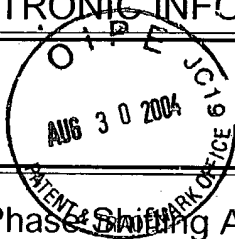
Authorized name: SKGF PLLC

Billing address: 20005

## ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0



Title of Invention

Phase-Shifting Applications of Universal Frequency Translation

Application Number: 09/590955

Confirmation Number: 2387

First Named Applicant: Martin JOHNSON

Attorney Docket Number: 1744.0710005

Art Unit: 2634

Examiner: Curtis B. Odom

Search string: ( 6687493 or 6694128 or 6704549 or 6704558 or 5490176 or 5970053 or 6078630 or 6600911 or 5179731 or 5589793 or 4510467 or 4772853 or 4972436 or 5012245 or 5422909 or 5440311 or 5926513 or 5995030 or 6047026 or 6049573 or 6076015 or 6144331 or 6018553 or 6317589 or 5058107 or 5757858 or 6531979 or 6018262 or 4761798 or 5982315 or 6459721 or 6151354 or 6169733 or 6363262 or 6697603 or 5678226 or 5760632 or 6160280 or 5481570 or 5745846 or 6031217 or 4132952 or 5260973 or 6307894 or 6091289 or 6437639 or 20020037706 ),pn.



RECEIVED

SEP 02 2004

Technology Center 2600

## US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	6687493	2004-02-03	Sorrells et al.	B1		
	2	6694128	2004-02-17	Sorrells et al.	B1		
	3	6704549	2004-03-09	Sorrells et al.	B1		
	4	6704558	2004-03-09	Sorrells et al.	B1		
	5	5490176	1996-02-06	Peltier			
	6	5970053	1999-10-19	Schick et al.			
	7	6078630	2000-06-20	Prasanna			
	8	6600911	2003-07-29	Morishige et al.	B1		
	9	5179731	1993-01-12	Trankle et al.			
	10	5589793	1996-12-31	Kassapian			
	11	4510467	1985-04-09	Chang et al.			
	12	4772853	1988-09-20	Hart			
	13	4972436	1990-11-20	Halim et al.			
	14	5012245	1991-04-30	Scott et al.			

	15	5422909	1995-06-06	Love et al.	
	16	5440311	1995-08-08	Gallagher et al.	
	17	5926513	1999-07-20	Suominen et al.	
	18	5995030	1999-11-30	Cabler	
	19	6047026	2000-04-04	Chao et al.	
	20	6049573	2000-04-11	Song	
	21	6076015	2000-06-13	Hartley et al.	
	22	6144331	2000-11-07	Jiang	
	23	6018553	2000-01-25	Sanielevici et al.	
	24	6317589	2001-11-13	Nash	B1
	25	5058107	1991-10-15	Stone et al.	
	26	5757858	1998-05-26	Black et al.	
	27	6531979	2003-03-11	Hynes	
	28	6018262	2000-01-25	Noro et al.	
	29	4761798	1988-08-02	Griswold, Jr. et al.	
	30	5982315	1999-11-09	Bazarjani et al.	
	31	6459721	2002-10-01	Mochizuki et al.	B1
	32	6151354	2000-11-21	Abbey	
	33	6169733	2001-01-02	Lee	
	34	6363262	2002-03-26	McNicol	B1
	35	6697603	2004-02-24	Lovinggood et al.	B1
	36	5678226	1997-10-14	Li et al.	
	37	5760632	1998-06-02	Kawakami et al.	
	38	6160280	2000-12-12	Bonn et al.	
	39	5481570	1996-01-02	Winters	
	40	5745846	1998-04-28	Myer et al.	
	41	6031217	2000-02-29	Aswell et al.	
	42	4132952	1979-01-02	Hongu et al.	
	43	5260973	1993-11-09	Watanabe	
	44	6307894	2001-10-23	Eidson et al.	B2
	45	6091289	2000-07-18	Song et al.	
	46	6437639	2002-08-20	Nguyen et al.	B1

RECEIVED

SEP 02 2004

Technology Center 2600

## US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
	1	20020037706	2002-03-28	Ichihara	A1		

SUB\_TYPE=Information\_Disclosure\_Statement EFS\_ID=67638 APP\_ID=09590955 DOC\_TYPE=us-ids

## Remarks

Note: Remarks are not for responding to an office action.

Patent Cite nos. 1-4 are co-owned patents which are directed to related subject matter. Cite nos. 1-4 and 29 were cited in a Notice of Allowance in related U.S. Patent Application No. 09/838,387, filed April 20, 2001, entitled "Method and System for Down-Converting and Up-Converting an Electromagnetic Signal, and Transforms for Same," directed to related subject matter. Also cited in said Notice of Allowance were U.S. Patent Nos. 5,937,013, 6,061,551, and 6,647,250, which have already been cited in the present application. Patent Cite nos. 2, 3, 43 and 44 were cited in a Notice of Allowance in related U.S. Patent Application No. 09/525,615, filed March 14, 2000, entitled "Method, System and Apparatus for Balanced Frequency Up-Conversion of a Baseband Signal and 4-Phase Receiver and Transceiver," directed to related subject matter. Also cited in said Notice of Allowance were U.S. Patent Nos. 6,091,940 and 6,370,371, which have already been cited in the present application. Patent Cite nos. 5-8 were cited in an Office Action in related U.S. Patent Application No. 09/567,978, filed May 10, 2000, entitled "Carrier and Clock Recovery Using Universal Frequency Translation," directed to related subject matter. Also cited in said Office Action was U.S. Patent No. 5,937,013, which has already been cited in the present application. Patent Cite nos. 9 and 10 were cited in a Notice of Allowance in related U.S. Patent Application No. 10/330,219, filed December 30, 2002, entitled "Methods and Systems for Down-Converting Electromagnetic Signals, and Applications Thereof," directed to related subject matter. Patent Cite nos. 11-22 were cited in an Office Action in related U.S. Patent Application No. 09/566,188, filed May 5, 2000, entitled "Integrated Frequency Translation and Selectivity with Gain Control Functionality, and Applications Thereof," directed to related subject matter. Patent Cite nos. 23 and 24 were cited in an Office Action in related U.S. Patent Application No. 09/632,856, filed August 4, 2000, entitled "Wireless Local Area Network (WLAN) Using Universal Frequency Translation Technology Including Multi-Phase Embodiments and Circuit Implementation," directed to related subject matter. Patent Cite nos. 25-27 were cited in an Office Action in related U.S. Patent Application No. 09/569,044, filed May 10, 2000, entitled "Universal Platform Module and Methods and Apparatuses Relating Thereto Enabled by Universal Frequency Translation Technology," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 2,057,613; 2,241,078; 2,283,575; 2,358,152; 2,410,350; 2,451,430; 2,472,798; 4,653,117; and 5,241,561, which have already been cited in the present application. Patent Cite no. 28 was cited in an Office Action in related U.S. Patent Application No. 10/289,377, filed November 7, 2002, entitled "Method and Apparatus for Reducing DC Offsets in a Communication System," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 5,471,665; 5,793,817; and 5,898,912, which have already been cited in the present application. Patent Cite nos. 30 and 31 were cited in an Office Action in related U.S. Patent Application No. 09/525,185, filed March 14, 2000, entitled "Spread Spectrum Applications of Universal Frequency Translation Technology," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 5,339,459; 5,369,789; and 5,937,013, which have already been cited in the present application. Patent Cite nos. 32-35 were cited in an Office Action in related U.S. Patent Application No. 09/569,045, filed May 10, 2000, entitled "Methods and Apparatuses Relating to a Universal Platform Module and Enabled by Universal Frequency Translation Technology," directed to



related subject matter. Also cited in said Office Action were U.S. Patent Nos. 5,339,459 and 5,557,641, which have already been cited in the present application. Patent Cite nos. 36-38 were cited in an Office Action in related U.S. Patent Application No. 09/550,642, filed April 14, 2000, entitled "Method and System for Down converting an Electromagnetic Signal, and Transforms for Same," directed to related subject matter. Patent Cite nos. 39 and 40 were cited in an Office Action in related U.S. Patent Application No. 10/317,165, filed December 12, 2002, entitled "Method and Apparatus for Reducing DC Offsets in Communication Systems Using Universal Frequency Translation Technology," directed to related subject matter. Patent Cite no. 41 was cited in an Office Action in related U.S. Patent Appl. No. 09/567,977, filed May 10, 2000, entitled, "Optical Down-converter Using Universal Frequency Translation Technology," directed to related subject matter. Patent Cite no. 42 was cited in an Office Action in related U.S. Patent Application No. 09/476,093, filed January 3, 2000, entitled "Communication System Method with Multi-Mode and Multi-Band Functionality and Embodiments Thereof, Such as the Family Radio Service," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 5,937,013 and 5,790,587, which have already been cited in the present application. Patent Cite nos. 45 and 46, and Published Application cite no. 1 were cited in a Written Opinion in related PCT Application No. PCT/US03/16403, filed May 27, 2003, entitled "Method and Apparatus for DC Offset Removal in a Radio Frequency Communication Channel," directed to related subject matter.

Signature

Examiner Name	Date